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MANAGING FOR
RESULTS

Challenges in Producing
Credible Performance
Information

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Managing for Results: Challenges in Producing Credible Performance Information

Madam Chairman, Mr. Traficant, and Members of the Subcommittee:

I am pleased to be here today to discuss the challenges federal agencies face in producing credible performance information—including the Department of Transportation (DOT), the Environmental Protection Agency (EPA), and the General Services Administration (GSA)—and the opportunities the Government Performance and Results Act (GPRA) provides for generating information to help Congress and other decisionmakers.

As you know, GPRA was passed in part out of Congress' frustration over the fact that congressional policymaking, spending decisions, and oversight had been seriously handicapped by agencies' lack of clear goals and adequate program performance and cost information. To remedy that situation, GPRA requires agencies to set multiyear strategic goals and corresponding annual performance goals, measure performance toward the achievement of those goals, and publicly report on their progress.

About 100 agencies, including DOT, EPA, and GSA, published a first set of strategic plans in 1997 and, as required, will issue updated plans by this September. These agencies also issued annual performance plans for fiscal years 1999 and 2000. Some agencies, such as EPA, have already published their plans for fiscal year 2001, and other plans will soon become available.

By the end of this month, agencies are to publish their first annual performance reports that, for the first time, will provide important information on the overall performance of federal programs. The issuance of these reports, therefore, represents a new and potentially more substantive stage in the implementation of GPRA. Performance reports offer Congress the opportunity to systematically assess agencies' actual performance on a governmentwide basis and to consider the specific steps that can be taken to improve performance and reduce costs.

Last month, we released our report on the challenges agencies face in producing credible performance information and how those challenges may affect performance reporting.¹ In that report, we state that it appears unlikely that agencies will consistently have for their first performance reports the reliable information needed to assess whether goals are being met or specifically how performance can be improved. Our work over the past several years has identified limitations in agencies' abilities to

¹ [Managing for Results: Challenges Agencies Face in Producing Credible Performance Information](#) (GAO/GGD-00-52, Feb. 4, 2000).

produce credible data and identify performance improvements. These limitations are substantial and long-standing, and they will not be quickly or easily resolved. These limitations are, therefore, likely to be reflected in agencies' initial performance reports as they have been in the performance plans prepared to date.

As agreed with the Subcommittee, my statement today will address three topics. First, I will provide a governmentwide perspective on the credibility of agencies' performance information based on our assessment of agencies' performance plans. Second, I will discuss some of the challenges agencies face—including DOT, EPA, and GSA—in producing credible performance data. Third, I will highlight how agencies can use their performance reports to address data credibility issues. My comments today are based on our large body of work on agencies' performance data problems and related issues.

Confidence in the Credibility of Agencies' Performance Information Is Limited

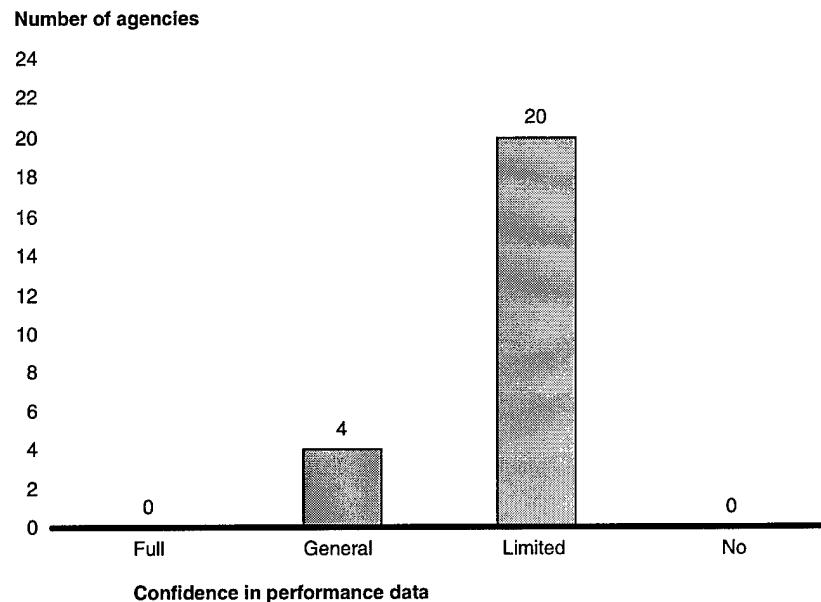
To efficiently and effectively operate, manage, and oversee programs and activities, agencies need reliable information during their planning efforts to set realistic goals and later, as programs are being implemented, to gauge their progress toward achieving those goals. Credible performance information is also essential for Congress and other decisionmakers to accurately assess agencies' progress towards the achievement of their goals.

As shown in figure 1, our analysis of agencies' fiscal year 2000 performance plans noted that most agencies—including EPA and GSA—provided only limited confidence that their performance information would be credible.² DOT was one of four agencies that provided general confidence that their performance information would be credible.³

² Managing for Results: Opportunities for Continued Improvements in Agencies' Performance Plans (GAO/GGD/AIMD-99-215, July 20, 1999).

³ In addition to DOT, the Department of Education, the Department of Justice, and the Social Security Administration provided general confidence in their fiscal year 2000 plans that their performance information would be credible.

Figure 1: Confidence in Performance Data



Source: GAO/GGD/AIMD-99-215, July 20, 1999.

Congress and other decisionmakers must have assurance that the program and financial data being used will be sufficiently timely, complete, accurate, useful, and consistent if these data are to inform decisionmaking. However, most agencies lacked information in their fiscal year 2000 performance plans on the procedures they would use to verify and validate performance information.

In addition, most agencies failed to include discussions of strategies to address known data limitations. We reported that when performance data are unavailable or of low quality, a performance plan would be more useful to Congress and other decisionmakers if it briefly discussed how the agency plans to deal with such limitations. Without such a discussion, Congress and other decisionmakers will have difficulty determining the implications for assessing the subsequent achievement of performance goals.

Challenges Agencies Face in Producing Credible Performance Information

Agencies need to build the capacity to gather and use performance information to successfully measure and report progress toward intended results. However, our work over the past several years has identified limitations in agencies' abilities to produce credible performance data.

For example, in our June 1998 review of GSA's building security upgrade program, we found limitations with data quality in GSA's building security update tracking system, which is used to track the status of security upgrades at federal buildings.⁴ We found that the system contained errors for 24 of the 53 buildings reviewed. A similar study conducted by GSA's Office of Inspector General (OIG) found that the status of security upgrades was not accurately reflected in 65 of the 120 buildings it reviewed. In 1999, we reexamined 31 of the buildings reviewed by either the OIG or us and found that GSA corrected many of the inaccuracies previously identified.⁵ However, we found that the tracking system continued to contain errors. We found errors concerning 10 buildings, about one-third of those we visited. Data inaccuracies included overstating the number or extent of security upgrades completed and misstating the operating status of security improvements. Without valid data, it is unlikely that GSA will be able to assess, first, the costs versus the benefits of upgrades; and, second, the extent to which completed upgrades have contributed to increased security or reduced vulnerability to the greatest threats to federal office buildings.

In general, we have found that limitations in performance data relate to 3 areas: (1) program design issues that may make it difficult to collect timely and consistent national data; (2) the relatively limited level of agencies' program evaluation capabilities; and (3) long-standing weaknesses in agencies' financial management capabilities, particularly in viewing program performance in relation to program cost.

Program Design Affects the Availability of Consistent and Reliable Information

Program design features have implications for the availability of consistent and reliable performance information. In several federal mission areas, devolution of program responsibility from the federal level has shifted both program management and accountability responsibilities toward the states.

Collecting consistent data to provide an overall, national picture of performance can be challenging when programs are implemented—and results achieved—through networks of intergovernmental partnerships. To illustrate, EPA depends on the state and local agencies it is working with to provide the performance information that indicates whether important environmental results are being achieved. For example, the state water

⁴ General Services Administration: Many Building Security Upgrades Made But Problems Have Hindered Program Implementation (GAO/T-GGD-98-141, June 4, 1998).

⁵ General Services Administration: Status of Efforts to Improve Management of Building Security Upgrade Program (GAO/T-GGD/OSI-00-19, Oct. 7, 1999.)

quality reports required by the Clean Water Act are a key source of information for measuring progress in cleaning up the nation's lakes, rivers, and streams. However, EPA has found that the wealth of environmental data EPA and states collect is often difficult to compile in a meaningful way.⁶

As provided in the Clean Water Act, Congress left the primary monitoring responsibility to the states for measuring progress in cleaning up the nation's lakes, rivers, and streams. However, inconsistencies in water quality assessments and in assessment methodologies from state to state make it difficult, first, to aggregate the data and; second, to use the information to conclusively determine whether the quality of rivers, lakes, and streams is getting better or worse over time. Absent this information, it has been difficult for EPA to set priorities, evaluate the success of its programs and activities, and report on its accomplishments in a credible and informed way.

Similar challenges confront DOT in determining the results of its efforts. DOT's Federal Highway Administration's (FHWA) efforts to increase the percentage of roads that meet pavement performance standards for good ride quality provide an example. To measure ride quality, FHWA uses the International Roughness Index (IRI), a quantitative measure of the amount a vehicle moves up and down while traveling over pavement. FHWA relies on the states to take and report IRI measurements. In September 1999, we reported that the IRI data are not consistent or accurate.⁷ We found that IRI data were not comparable between states, because states differed in the devices, procedures, and mathematical simulations they used to calculate the index. These differences reduce the accuracy of the IRI data disseminated by FHWA and limit the ability to make state-to-state comparisons. As we recommended, in December 1999, FHWA adopted new standards that should improve the consistency of state data.

The problems at EPA and DOT in obtaining consistent and reliable information are not isolated to these two agencies. Our governmentwide survey of mid- and upper level federal managers, conducted in late 1996 and 1997, found that 34.8 percent of managers identified the use of differing definitions as a factor that hindered their measurement or use of

⁶ Major Management Challenges and Program Risks: Environmental Protection Agency (GAO/OCG-99-17, January 1999).

⁷ Transportation Infrastructure: Better Data Needed to Rate the Nation's Highway Conditions (GAO/RCED-99-264, Sept. 27, 1999).

performance measures to either a great or a very great extent.⁸ At the request of the Senate Subcommittee on Oversight of Government Management, Restructuring, and the District of Columbia, we are currently surveying federal managers again to follow up on whether there have been any changes in their opinions on a wide range of management issues, including the quality and consistency of performance data.

Program Evaluation Is Essential, but Federal Capacity Is Limited

A fundamental challenge confronting Congress and agencies in improving federal performance is ensuring data-derived understandings exist of the contributions that specific programs agencies implement make to achieving results. Such understandings are important for Congress and agencies to ensure that agencies have the best mix of programs and strategies in place to achieve results as well as pinpoint and act on improvement opportunities. In this regard, program evaluation studies are important for assessing the contributions programs are making to results, determining factors affecting performance, and identifying improvement opportunities. However, we continue to be concerned that many federal agencies lack the capacity to undertake program evaluations. The absence of program evaluation capacity is a major concern, because a federal environment that focuses on results—where federal efforts are often but one factor among many that determine whether goals are achieved—depends on program evaluation to provide vital information about the effect of the federal effort.

Further, in our assessment of agencies' fiscal year 2000 plans, we noted that few agencies indicated how their strategies would contribute to accomplishing results. Similar to most other agencies, EPA and GSA provided general discussions of how resources and strategies will be used to achieve results, but DOT was the only agency offering specific discussions. DOT listed in its fiscal year 2000 performance plan an overall strategy for achieving each of its performance goals, as well as specific activities and initiatives.⁹ For example, DOT expects to increase transit ridership through (1) investments in transit infrastructure, (2) financial assistance to metropolitan planning organizations and state departments of transportation for planning activities, (3) research on improving train control systems, and (4) fleet management to provide more customer service.

⁸ The Government Performance and Results Act: 1997 Governmentwide Implementation Will Be Uneven (GAO/GGD-97-109, June 2, 1997).

⁹ Results Act: Observations on the Department of Transportation's Fiscal Year 2000 Performance Plan (GAO/RCED-99-153, May 7, 1999).

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However, even in DOT's case, there is ample room for continued progress. For example, DOT identified the rehabilitation of approximately 200 airport runways in the year 2000 as one of the activities contributing to the performance goal concerning the condition of runway pavement. We reported that there is a lack of information identifying the point at which rehabilitation or maintenance of pavement can be done before relatively rapid deterioration sets in. As a result, the Federal Aviation Administration (FAA) is not in a position to determine which projects are being proposed at the most economical time.¹⁰ As we recommended, FAA plans to require airport sponsors to submit specific pavement condition information when applying for runway rehabilitation projects to aid FAA in setting priorities for airport improvement program funds.

Strong program evaluation capacity is needed to provide feedback on how well an agency's activities and programs contributed to achieving its results. Good evaluation information about program effects is difficult to obtain. Each of the tasks involved—measuring results, ensuring the consistency and quality of data collected, establishing the causal connection between results and program activities, and separating out the influence of extraneous factors—raises formidable technical or logistical problems that are not easily resolved. Thus, evaluating program impact generally requires a planned study and, often, considerable time and expense.

Viewing Program Performance in Relation to Program Cost

Conclusions about what the government is accomplishing with the taxpayers' money cannot be drawn without linking performance with program and cost information. Viewing program performance in relation to program cost as envisioned by GPRA—for instance, by establishing the unit cost per output or outcome achieved—can help Congress in its oversight, authorization, and appropriations capacities. Unfortunately, program and cost information has not always been present or reliable enough either to use in decisionmaking or to provide the requisite public accountability for the use of taxpayers' money.

This Subcommittee's September 30, 1999, hearing focused specifically on the issue of the quality of financial data. In our statement for that hearing, we noted that major reforms, such as the Chief Financial Officers (CFO) Act, set expectations for agencies to develop and deploy more modern financial management systems and to routinely produce sound cost and

¹⁰ Airfield Pavement: Keeping Nation's Runways in Good Condition Could Require Substantially Higher Spending (GAO/RCED-98-226, July 31, 1998).

operating performance information, among other things.¹¹ More fundamentally, the Federal Financial Management Improvement Act (FFMIA) focused, among other things, on ensuring that agency financial management systems routinely provide reliable, useful, and timely financial information. The overhauling of financial and related management information systems is the overarching challenge for agencies in generating timely, reliable data throughout the year. With such information, Congress and other decisionmakers will be better positioned to invest scarce resources, reduce costs, oversee programs, and hold agency managers accountable for the way they run government programs. For fiscal year 1999, auditors found that financial management systems for 19 of the 22 agencies reporting to date, including DOT, EPA, and GSA, did not substantially comply with FFMIA's requirements.¹²

Performance Reports Provide Opportunities to Show Progress in Addressing Data Credibility Issues

The March 2000 performance reports for DOT, GSA, EPA, and other agencies provide them with an opportunity to show the progress they have made in addressing data credibility issues. As far back as our earliest assessment of agencies' efforts to implement GPRA, and more recently in our reviews of agencies' strategic and performance plans, we identified data credibility issues as a persistent and continuing challenge for agencies.¹³ In passing GPRA, Congress emphasized that the usefulness of agencies' performance information depends, to a large degree, on the reliability and validity of their data.

During this past year, we issued several reports on practices and approaches that agencies have proposed or adopted that address data credibility issues.¹⁴ For example, we reported that applied practices, such as identifying actions to compensate for unavailable or low-quality data and discussing implications of data limitations for assessing performance,

¹¹ Financial Management: Financial Audit Results at GSA, EPA, and DOT (GAO/T-AIMD-99-301, Sept. 30, 1999).

¹² The three agencies in compliance were the Department of Energy, the National Aeronautics and Space Administration, and the National Science Foundation.

¹³ GAO/GGD/AIMD-99-215, July 20, 1999; Managing for Results: An Agenda To Improve the Usefulness of Agencies' Annual Performance Plans (GAO/GGD/AIMD-98-228, Sept. 8, 1998); Managing for Results: Agencies' Annual Performance Plans Can Help Address Strategic Planning Challenges (GAO/GGD-98-44, Jan. 30, 1998); GAO/GGD-97-109, June 2, 1997; and CPRA Performance Reports (GAO/GGD-96-66R, Feb. 14, 1996).

¹⁴ Managing for Results: Strengthening Regulatory Agencies' Performance Management Practices (GAO/GGD-00-10, Oct. 28, 1999); Performance Plans: Selected Approaches for Verification and Validation of Agency Performance Information (GAO/GGD-99-139, July 30, 1999); and Agency Performance Plans: Examples of Practices That Can Improve Usefulness to Decisionmakers (GAO/GGD/AIMD-99-69, Feb. 26, 1999).

can help agencies describe to Congress and others the agencies' capacity to gather and use performance information.

To illustrate, the Department of Transportation stated in its fiscal years 1999 and 2000 performance plans that one of the most significant limitations of both internal and external data is timeliness. One way that DOT plans to deal with this limitation is to compile preliminary estimates from the portion of data that is available in time to report on the performance measures. According to DOT, fatality data from the first 6 months of the year could be compared with data from the first 6 months of the previous year for an initial performance measurement.

In our report on reasonable approaches to verify and validate performance information, we identified a wide range of possible approaches that can be organized into four general strategies, as follows:

- Management can seek to improve the quality of performance data by fostering an organizational commitment and capacity for data quality.
- Verification and validation can include assessing the quality of existing performance data.
- Assessments of data quality are of little value unless agencies are responding to identified data limitations.
- Building quality into the development of performance data may help prevent future errors and minimize the need to continually fix existing data.

These approaches can help agencies improve the quality, usefulness, and credibility of performance information.

Summary

In summary, Madam Chairman, sound performance data are key to strengthening decisionmaking in agencies and in Congress and pinpointing specific opportunities for improved performance. As stated earlier, the issuance of the first performance reports will provide important information on the overall performance of federal programs. Discussing data credibility and related issues in performance reports can provide important contextual information to Congress and agencies to help them address the weaknesses in this area. For example, this sort of discussion in an agency's performance report can alert Congress to the problems the agency has had in collecting results-oriented performance information. Agencies can also alert Congress to the cost and data quality trade-offs associated with various collection strategies, such as relying on sources outside the agency to provide performance data and the degree to which those data are expected to be reliable.

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Madam Chairman, this concludes my prepared statement. I would be pleased to respond to any questions that you or other Members of the Subcommittee may have.

Contacts and Acknowledgments

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